

Changes in Attitudes Toward Women
at the Air Force Academy

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Abstract

Sex-role attitudes were measured at the Air Force Academy by Marshak, DeFleur, and Gillman (1976), using the Attitudes toward Women Scale (Spence & Helmreich, 1972). The attitudes were significantly less egalitarian than those held by male college students at the University of Texas at Austin. Festinger's Cognitive Dissonance Theory (1957) predicts that as perceptions of mandated social change decrease, attitudes held by cadets would become more egalitarian. In cadets sampled in 1983, males are significantly more egalitarian than in 1976, but there's no significant difference between 1983 cadets and 1980 college students. There's a significant trend in male cadets: the longer he's been at the Academy, the more egalitarian he is. As expected, comparison between 1983 male and female cadets showed women were significantly more egalitarian than men.

Introduction

Background

Since the integration of women into the service academies in 1976, several studies have tested cadets' sex-role attitudes. These studies came to the same conclusion: the men's attitudes toward women are significantly more conservative than those held by their civilian counterparts.

The first study (Vitters & Kinzer, 1976) was done at the U.S. Military Academy. It found that the all-male upperclass was significantly more conservative than civilians in the attitudes they held. The second study, by Marshak, DeFleur and Gillman (1976), found the same conservative trend in the Air Force Academy cadets. A unique study was done at the Coast Guard Academy by Rottman (1980). She attempted to change male cadet attitudes through cognitive dissonance. The results weren't significant, unfortunately, but the study proved cadets at the Coast Guard Academy still held conservative attitudes as late as 1980.

Festinger's Cognitive Dissonance theory (1957) predicts that people behave to reduce dissonance created by conflicting attitudes or beliefs. During mandated social change, however, there's less pressure to reduce

dissonance created by conflicting attitudes or beliefs. In the context of a service academy, accepting women was a mandated social change, so there's little pressure to reduce any dissonance.

Over time, the perceptions of mandated social change decrease, since women aren't a recent addition any more. Marshak, et al (1976), predicted that the acceptance of women in the service academies would be similar to the earlier integration of blacks: early resistance and later acceptance.

In 1978, Heilman and Guzzo reported that perceptions of the cause of work success could act as a mediator of sex-role biases. Basically, they found that if women were perceived as being successful due to their ability, they were perceived as being successful as men at the same task. At the AFA in recent years, women have held increasingly responsible jobs in the cadet wing. Requirements are stringent: jobholders must have good grades and a good military bearing. Military performance ratings might be written off as subjective but grades are an accepted measure of performance. In 1981-82 one of the wing commanders was a woman. With such successes by women, which have to be attributed to their ability, one could expect attitudes to become more egalitarian.

Today, with every class at the Academy only being in contact with integrated classes, women aren't a new phenomenon in the cadet wing. There's little media coverage on the subject of forced integration, and the Academy is doing nothing to publicize past troubles. Dissonance theory would predict that attitudes would become more egalitarian as perceptions of mandated social change decrease.

Method

Subjects in this study were 120 male cadets (30 from each class) and 30 female (5 seniors, 10 juniors, 9 sophomores, 6 freshmen). They were tested during a core course to get a random sample. The testing apparatus was the 25-item version of the Attitudes toward Women Scale (AWS) (Spence & Helmreich, 1972) used in the 1976 AFA studies. A score for the 15-item AWS was extracted for comparison with 1980 civilian data (Spence, Personal Communication).

Using a one-way analysis of variance (ANOVA), the male cadet sample was tested for differences between the classes. A separate one-way ANOVA was done on male-female cadet attitude differences. Comparisons were made between the 1983 male cadet sample and both the 1976 cadets and 1980 civilian students using two t-tests. The 1983 scores were taken for all four classes at the Academy, while the 1976 scores were taken from seniors, juniors, and freshmen only. The standard deviation from the 1983 cadet sample was used in the comparison with 1980 college students because civilian dispersion was not available. The α -level for each t-test was held at .02 to get an overall α -level of .05. The statistics were computed by hand or by using the Statistical Package for the Social Sciences (SPSS) (Nie, et al, 1975).

Results

The results of the first ANOVA are interesting: the longer a male cadet has been at the Academy, the more egalitarian he is as measured by AWS. The difference between the classes was significant ($F=3.906$, $df=3$, 116 , $p < .05$). It's encouraging to find that the Academy's curriculum has beneficial side effects.

As expected, the women at the Academy are more egalitarian than the men. The difference was significant ($F=27.5$, $df=1$, 148 , $p < .001$). To want to enter a predominantly male service academy, a woman has to know she can do as well as a man.

1983 male cadets are significantly more egalitarian than their 1976 counterparts ($t=3.69$, $df=119$, $p < .001$). According to data from Dr. Janet Spence, there wasn't a comparative trend between 1976 and 1980 college students: the biggest change was between 1972 and 1976 students. One possible reason this change was slow to show up in cadets is the Academy's selection process. The Academy likely attracts people with more conservative values, so it took longer for the change to appear.

The most encouraging finding was that 1983 male cadets aren't significantly different from 1980 college students if males haven't shifted ($t=1.145$, $df=119$, N.S.). This is exciting because of what it says about society and the changes at the Air Force Academy: society is more egalitarian, and the Academy is changing, too.

Discussion

The results bear out the prediction of Festinger's Cognitive Dissonance theory, which is that as perceptions of mandated social change decrease, attitudes held by male cadets would tend to become more egalitarian. There may be several reasons for this egalitarian shift. The men may see the women's favoritism. Over time, the perceptions of forced compliance have decreased, so there's more pressure to reduce dissonance. The possibility that society has become more egalitarian was refuted by the survey by Helmreich, Spence, and Gibson (1982). They found that society leveled off over the time the cadet comparison was made.

A more plausible explanation for the delay in the egalitarian shift is the Academy's selection process. Service academies usually attract students who feel traditional and probably hold conservative ideas about their country and, consequently, women also. As society changes, though, it's good to see the Air Force Academy is keeping pace.

That women at the Academy believe women are more capable than the men at the Academy is to be expected. Being a woman in a traditionally male role implies a belief in women's abilities. The differences between the male classes is encouraging. Possibly the men enter with traditional views and have them refuted by seeing women excel in an extremely tough environment.

One obvious question jumps out after these findings: what are the attitudes at the other service academies? If they're less egalitarian, is it due to the selection process or something the Air Force Academy is doing that they aren't? If they're more egalitarian, is it due to the selection process, again, or to something the other academies are doing that the Air Force Academy isn't? This is a promising area for further research.

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References

- Baron, R.A., & Byrne, D. Exploring Social Psychology. Boston: Allyn and Bacon, Inc., 1982.
- Heilman, M.E., & Guzzo, R.A. The perceived cause of work success as a mediator of sex discrimination in organizations. Organizational Behavior and Human Performance, 1978, 21, 346-357.
- Helmreich, R.L., Spence, J.T., & Gibson, R.H. Sex-role attitudes: 1972-1980. Personality and Social Psychology Bulletin, 1982, 8, 656-663.
- Hinkle, D.E., Wiersma, W., & Jurs, S.G. Applied Statistics for the Behavioral Sciences. Boston: Houghton Mifflin Co., 1979.
- Marshak, W.P. Integration of women into the United States Air Force Academy: attitudes during the initial year. Unpublished masters project, University of North Dakota, 1978.
- Nie, N.H., Hull, C.H., Jenkins, J.G., Steinbrenner, K., & Bent, D.H. Statistical Package for the Social Sciences. New York: McGraw-Hill Book Co., 1975.
- Rottman, M.N. Effects of a self-administered feminine literature package on attitudes toward sex-role stereotypes among third-class cadets at the United States Coast Guard Academy. Unpublished doctoral dissertation, University of Connecticut, 1980.